



DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO

GOVERNOR

MIKE D. McDANIEL, Ph.D.

SECRETARY

Certified Mail No.

Activity No.: PER20020001

Agency Interest No. 26034

Cordell Grand
General Manager
210 Venture Way
Lafayette, LA 70507

RE: Part 70 Operating Permit, Plaquemine Steam Electric Power Plant
Louisiana Energy & Power Authority (LEPA), Plaquemine, Iberville Parish, Louisiana

Dear Mr. Grand:

This is to inform you that the permit renewal for the above referenced facility has been approved under LAC 33:III.501. The permit is both a state preconstruction and Part 70 Operating Permit. The submittal was approved on the basis of the emissions reported and the approval in no way guarantees the design scheme presented will be capable of controlling the emissions as to the types and quantities stated. A new application must be submitted if the reported emissions are exceeded after operations begin. The synopsis, data sheets and conditions are attached herewith.

It will be considered a violation of the permit if all proposed control measures and/or equipment are not installed and properly operated and maintained as specified in the application.

Operation of this facility is hereby authorized under the terms and conditions of this permit. This authorization shall expire at midnight on the ____ of _____, 2012, unless a timely and complete renewal application has been submitted six months prior to expiration. Terms and conditions of this permit shall remain in effect until such time as the permitting authority takes final action on the application for permit renewal. The permit number and agency interest number cited above should be referenced in future correspondence regarding this facility.

Done this _____ day of _____, 2007.

Permit No.: 1280-00026-V1

Sincerely,

Chuck Carr Brown Ph.D.
Assistant Secretary
CCB:dcd
c: EPA Region VI

ENVIRONMENTAL SERVICES

: PO BOX 4313, BATON ROUGE, LA 70821-4313

P:225-219-3181 F:225-219-3309

WWW.DEQ.LOUISIANA.GOV

PUBLIC NOTICE
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ)
LOUISIANA ENERGY AND POWER AUTHORITY - PLAQUEMINE STEAM ELECTRIC POWER PLANT
PROPOSED PART 70 AIR OPERATING PERMIT RENEWAL & MINOR MODIFICATION

The LDEQ, Office of Environmental Services, is accepting written comments on the Part 70 air operating permit renewal and minor modification for Louisiana Energy and Power Authority, 210 Venture Way, Lafayette, LA 70549, for the Plaquemine Steam Electric Power Plant. The facility is located at 59335 W W Harleaux St, Plaquemine, Iberville Parish.

Plaquemine Steam Electric Power Plant, an existing electric power generation facility which is currently operates under Permit No. 1280-00026-V0, issued September 16, 1997.

Louisiana Energy and Power Authority requested the following changes:

- Incorporate Compliance Assurance Monitoring (CAM) provisions for Boiler #2 in accordance with 40 CFR 64.
- Incorporate terms and conditions necessary to verify exemption from the requirements of 40 CFR 60.45(a).
- Revise emissions estimates based on updated emission factors

Pollutant	Before	After	Change
PM ₁₀	39.53	45.45	+ 5.92
SO ₂	1.48	1.39	- 0.09
NO _x	1349.04	492.66	- 856.38
CO	98.11	221.56	+ 123.45
VOC ¹	3.53	12.81	+ 9.28
¹ Toxic VOC included in Totals	-	4.347	+ 4.347

A technical review of the working draft of the proposed permit was submitted to the facility representative and the LDEQ Surveillance Division. Any remarks received during the technical review will be addressed in the "Worksheet for Technical Review of Working Draft of Proposed Permit". All remarks received by LDEQ are included in the record that is available for public review.

Written comments, written requests for a public hearing or written requests for notification of the final decision regarding this permit action may be submitted to Ms. Soumaya Ghosn at LDEQ, Public Participation Group, P.O. Box 4313, Baton Rouge, LA 70821-4313. **Written comments and/or written requests must be received by 12:30 p.m., Thursday, May 31, 2007.** Written comments will be considered prior to a final permit decision.

If LDEQ finds a significant degree of public interest, a public hearing will be held. LDEQ will send notification of the final permit decision to the applicant and to each person who has submitted written comments or a written request for notification of the final decision.

The proposed permit, permit application and statement of basis are available for review at the LDEQ, Public Records Center, Room 127, 602 North 5th Street, Baton Rouge, LA. Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays). The available information can also be accessed electronically on the Electronic Document Management System (EDMS) on the DEQ public website at www.deq.louisiana.gov.

Additional copies may be reviewed at the Iberville Parish Library – Headquarters located at 24605 J. Gerald Berret Blvd., Plaquemine LA 70764.

Inquiries or requests for additional information regarding this permit action should be directed to Mr. Dustin Duhon, LDEQ, Air Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, phone (225) 219-3057.

Persons wishing to be included on the LDEQ permit public notice mailing list or for other public participation related questions should contact the Public Participation Group in writing at LDEQ, P.O. Box 4313, Baton Rouge, LA 70821-4313, by email at maillistrequest@ldeq.org or contact the LDEQ Customer Service Center at (225) 219-LDEQ (219-5337).

Permit public notices including electronic access to the proposed permit and statement of basis can be viewed at the LDEQ permits public notice webpage at www.deq.louisiana.gov/apps/pubNotice/default.asp and general information related to the public participation in permitting activities can be viewed at www.deq.louisiana.gov/portal/tabid/2198/Default.aspx.

Alternatively, individuals may elect to receive the permit public notices via email by subscribing to the LDEQ permits public notice List Server at http://www.doa.louisiana.gov/oes/listservpage/ldeq_pn_listserv.htm.

All correspondence should specify AI Number 26034, Permit Number 1280-00026-V1, and Activity Number PER20020001.

Scheduled Publication Date: Thursday, April 26, 2007.

AIR PERMIT BRIEFING SHEET
AIR PERMITS DIVISION
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

PLAQUEMINE STEAM ELECTRIC POWER PLANT
AGENCY INTEREST NO.: 26034
LOUISIANA ENERGY & POWER AUTHORITY (LEPA)
PLAQUEMINE, IBERVILLE PARISH, LOUISIANA

I. Background

Plaquemine Steam Electric Power Plant, an existing electric power generation facility began operation prior to 1980. The Plaquemine Steam Electric Power Plant is owned by the City of Plaquemine and operated by Louisiana Energy and Power Authority. The Plaquemine Steam Electric Power Plant currently operates under Permit No. 1280-00026-V0, issued September 16, 1997.

This is the Part 70 operating permit renewal for the facility.

II. Origin

A permit application and Emission Inventory Questionnaire were submitted by Louisiana Energy & Power Authority (LEPA) on July 16, 2002, requesting a Part 70 operating permit renewal. Additional information dated September 21, 2005, January 18, 2006, January 26, 2006, August 16, 2006, and September 26, 2006, was also received.

III. Description

The Plaquemine Steam Electric Power Plant is an electric power generation facility that consists of two boilers (EQT 1 and EQT 2) and two cooling towers (EQT 3 and EQT 4). The boilers burn natural gas exclusively. This facility is used to provide power during times of peak demand. Emissions increases associated with this project are not the result of a physical change or change in the method of operation.

In order to qualify for an exemption from the requirement to install a continuous emissions monitoring system for nitrogen oxides on Boiler #2 (EQT 2) as required by 40 CFR 60 Subpart D, this source must operate with the automatic system that controls the air inlet vanes engaged and in working order. In addition, the source may not operate with a heat input of greater than 272 million BTU/hr.

With this modification, Plaquemine Steam Electric Power Plant proposes to:

- Incorporate Compliance Assurance Monitoring (CAM) provisions for Boiler #2 in accordance with 40 CFR 64.
- Incorporate terms and conditions necessary to verify exemption from the requirements of 40 CFR 60.45(a).
- Revise emissions estimates based on updated emission factors

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Estimated emissions in tons per year are as follows:

<u>Pollutant</u>	<u>Before</u>	<u>After</u>	<u>Change</u>
PM ₁₀	39.53	45.45	+ 5.92
SO ₂	1.48	1.39	- 0.09
NO _x	1349.04	492.66	- 856.38
CO	98.11	221.56	+ 123.45
VOC *	3.53	12.81	+ 9.28

VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):

<u>Pollutant</u>	<u>Emissions</u>
Benzene	0.027
1,4-Dichlorobenzene	0.015
Formaldehyde	0.108
n-Hexane	4.191
Toluene	0.006
Total	4.347

Other VOC (TPY): 8.46

IV. Type of Review

This permit was reviewed for compliance with 40 CFR 70, the Louisiana Air Quality Regulations, and New Source Performance Standards (NSPS). Prevention of Significant Deterioration (PSD) and National Emission Standards for Hazardous Air Pollutants (NESHAP) do not apply.

This facility is a minor source of toxic air pollutants (TAPs) pursuant to LAC 33:III.Chapter 51.

AIR PERMIT BRIEFING SHEET
AIR PERMITS DIVISION
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V. Credible Evidence

Notwithstanding any other provisions of any applicable rule or regulation or requirement of this permit that state specific methods that may be used to assess compliance with applicable requirements, pursuant to 40 CFR Part 70 and EPA's Credible Evidence Rule, 62 Fed. Reg. 8314 (Feb. 24, 1997), any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed shall be considered for purposes of Title V compliance certifications. Furthermore, for purposes of establishing whether or not a person has violated or is in violation of any emissions limitation or standard or permit condition, nothing in this permit shall preclude the use, including the exclusive use, by any person of any such credible evidence or information.

VI. Public Notice

A notice requesting public comment on the permit was published in *The Advocate*, Baton Rouge, on <date>, 200X; and in the <local paper>, <local town>, on <date>, 200X. A copy of the public notice was mailed to concerned citizens listed in the Office of Environmental Services Public Notice Mailing List on <date>. The draft permit was also submitted to US EPA Region VI on <date>. All comments will be considered prior to the final permit decision.

VII. Effects on Ambient Air

None

VIII. General Condition XVII Activities

None

IX. Insignificant Activities

ID No.:	Description	Citation
-	NG Distillate Tank (4,240 gallons)	LAC 33:III.501.B.5.A.3
-	Lube Oil Tank No. 1 (1,795 gallons)	LAC 33:III.501.B.5.A.3
-	Lube Oil Tank No. 2 (1,795 gallons)	LAC 33:III.501.B.5.A.3

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AGENCY INTEREST NO.: 26034
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PLAQUEMINE, IBERVILLE PARISH, LOUISIANA**

X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

ID No.:	Description	LAC 33:III. Chapter												
		5	509	9	11	13	15	2103	2104*	2107	2111	2113	2116*	2123
	Plant Wide	1		1	1	1						1		
EQT 1	C1 – Boiler No. 1	1			1	1	1							
EQT 2	C2 – Boiler No. 2	1			1	1	1							
EQT 3	X1 – Cooling Tower No. 1					1								
EQT 4	X2 – Cooling Tower No. 2					1								

* The regulations indicated above are State Only regulations.

KEY TO MATRIX

- 1 -The regulations have applicable requirements that apply to this particular emission source.
- The emission source may have an exemption from control stated in the regulation. The emission source may not have to be controlled but may have monitoring, recordkeeping, or reporting requirements.
- 2 -The regulations have applicable requirements that apply to this particular emission source but the source is currently exempt from these requirements due to meeting a specific criterion, such as it has not been constructed, modified or reconstructed since the regulations have been in place. If the specific criteria changes the source will have to comply at a future date.
- 3 -The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, and fugitives) but do not apply to this particular emission source.

Blank – The regulations clearly do not apply to this type of emission source.

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X. Table 1. Applicable Louisiana and Federal Air Quality Requirements																				
ID No.:	Description	40 CFR 60 NSPS								40 CFR 61			40 CFR 63 NESHAP				40 CFR			
		A	K	Ka	Kb	D	Dc	GG	KKK	III	A	J	V	A	HH	SS	VV	HHH	64	68
	Plant Wide																			
EQT 1	C1 – Boiler No. 1					3														
EQT 2	C2 – Boiler No. 2					1														
EQT 3	X1 – Cooling Tower No. 1																			
EQT 4	X2 – Cooling Tower No. 2																			

KEY TO MATRIX

- 1 -The regulations have applicable requirements that apply to this particular emission source.
- The emission source may have an exemption from control stated in the regulation. The emission source may not have to be controlled but may have monitoring, recordkeeping, or reporting requirements.
- 2 -The regulations have applicable requirements that apply to this particular emission source but the source is currently exempt from these requirements due to meeting a specific criterion, such as it has not been constructed, modified or reconstructed since the regulations have been in place. If the specific criteria changes the source will have to comply at a future date.
- 3 -The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, and fugitives) but do not apply to this particular emission source.

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XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Notes
EQT 1	NSPS Subpart D - Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced after August 17, 1971 [40 CFR 60.40]	DOES NOT APPLY. Unit was last constructed, modified, or reconstructed prior to August 17, 1971. [40 CFR 60.40(c)]
EQT 1 EQT 2	Emissions Standards for Sulfur Dioxide [LAC 33:III.1503]	EXEMPT. Units emit less than 250 tons per year of sulfur dioxide. [LAC 33:III.1503.C]

The above table provides explanation for either the exemption status or non-applicability of a source cited by 1, 2 or 3 in the matrix presented in Section X (Table 1) of this permit.

40 CFR PART 70 GENERAL CONDITIONS

- A. The term of this permit shall be five (5) years from date of issuance. An application for a renewal of this 40 CFR Part 70 permit shall be submitted to the administrative authority no later than six months prior to the permit expiration date. Should a complete permit application not be submitted six months prior to the permit expiration date, a facility's right to operate is terminated pursuant to 40 CFR Section 70.7(c)(ii). Operation may continue under the conditions of this permit during the period of the review of the application for renewal. [LAC 33:III.507.E.1, E.3, E.4, reference 40 CFR 70.6(a)(2)]
- B. The conditions of this permit are severable; and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby. [Reference 40 CFR 70.6(a)(5)]
- C. Permittee shall comply with all conditions of the 40 CFR Part 70 permit. Any permit noncompliance constitutes a violation of the Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [LAC 33:III.507.B.2, reference 40 CFR 70.6(a)(6)(i) & (iii)]
- D. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [Reference 40 CFR 70.6(a)(6)(ii)]
- E. This permit does not convey any property rights of any sort, or an exclusive privilege. [Reference 40 CFR 70.6(a)(6)(iv)]
- F. The permittee shall furnish to the permitting authority, within a reasonable time, any information that the permitting authority may request in writing to determine whether cause exists for modifying, revoking, and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the permitting authority copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality. A claim of confidentiality does not relieve the permittee of the requirement to provide the information. [LAC 33:III.507.B.2, 517.F, reference 40 CFR 70.6(a)(6)(v)]
- G. Permittee shall pay fees in accordance with LAC 33:III.Chapter 2 and 40 CFR Section 70.6(a)(7). [LAC 33:III.501.C.2, reference 40 CFR 70.6(a)(7)]
- H. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the permitting authority or authorized representative to perform the following:
 - 1. enter upon the permittee's premises where a 40 CFR Part 70 source is located or emission-related activity is conducted, or where records must be kept under the conditions of the permit [LAC 33:III.507.H.2, reference 40 CFR 70.6(c)(2)(i)];
 - 2. have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit [LAC 33:III.507.H.2, reference 40 CFR 70.6(c)(2)(ii)];
 - 3. inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit [LAC 33:III.507.H.2, reference 40 CFR 70.6(c)(2)(iii)]; and

40 CFR PART 70 GENERAL CONDITIONS

4. as authorized by the Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [LAC 33:III.507.H.2, reference 40 CFR 70.6(c)(2)(iv)]
- I. All required monitoring data and supporting information shall be kept available for inspection at the facility or alternate location approved by the agency for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Supporting information includes calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and all reports required by the permit.
[Reference 40 CFR 70.6(a)(3)(ii)(B)]
- J. Records of required monitoring shall include the following:
 1. the date, place as defined in the permit, and time of sampling or measurements;
 2. the date(s) analyses were performed;
 3. the company or entity that performed the analyses;
 4. the analytical techniques or methods used;
 5. the results of such analyses; and
 6. the operating conditions as existing at the time of sampling or measurement.
[Reference 40 CFR 70.6(a)(3)(ii)(A)]
- K. Permittee shall submit at least semiannually, reports of any required monitoring, clearly identifying all instances of deviations from permitted monitoring requirements, certified by a responsible company official. For previously reported deviations, in lieu of attaching the individual deviation reports, the semiannual report may clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. The semiannual reports shall be submitted to the Office of Environmental Compliance, Enforcement Division by March 31 for the preceding period encompassing July through December and September 30 for the preceding period encompassing January through June. Any quarterly deviation report required to be submitted by March 31 or September 30 in accordance with Part 70 General Condition R may be consolidated with the semi-annual reports required by this general condition as long as the report clearly indicates this and all required information is included and clearly delineated in the consolidated report. [LAC 33:III.507.H, reference 40 CFR 70.6(a)(3)(iii)(A)]
- L. The permittee shall submit at least semiannual reports on the status of compliance pursuant to 40 CFR Section 70.5 (c) (8) and a progress report on any applicable schedule of compliance pursuant to 40 CFR Section 70.6 (c) (4). [LAC 33:III.507.H.1, reference 40 CFR 70.6(c)(4)]
- M. Compliance certifications per LAC 33:III.507.H.5 shall be submitted to the Administrator as well as the permitting authority. For previously reported compliance deviations, in lieu of attaching the individual deviation reports, the annual report may clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. The compliance certifications shall be submitted to the Office of Environmental Compliance, Enforcement Division by March 31 for the preceding calendar year. [LAC 33:III.507.H.5, reference 40 CFR 70.6(c)(5)(iv)]
- N. If the permittee seeks to reserve a claim of an affirmative defense as provided in LAC 33:III.507.J.2, the permittee shall, in addition to any emergency or upset provisions in any applicable regulation, notify the permitting authority within 2 working days of the time when emission limitations were exceeded due to the occurrence of an upset. In the event of an upset, as defined under LAC 33:III.507.J, which results in excess emissions, the permittee shall demonstrate through properly signed, contemporaneous operating logs, or other relevant evidence that: 1) an

40 CFR PART 70 GENERAL CONDITIONS

emergency occurred and the cause was identified; 2) the permitted facility was being operated properly at the time; and 3) during the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standard or requirement of the permit. [LAC 33:III.507.J.2, reference 40 CFR 70.6(g)(3)(iv) & (i-iii)]

- O. Permittee shall maintain emissions at a level less than or equal to that provided for under the allowances that the 40 CFR Part 70 source lawfully holds under Title IV of the Clean Air Act or the regulations promulgated thereunder. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement. Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Clean Air Act. [Reference 40 CFR 70.6(a)(4)]
- P. Any permit issued pursuant to 40 CFR Part 70 may be subject to reopening prior to the expiration of the permit for any of the conditions specified in 40 CFR Section 70.7(f) or LAC 33:III.529. [LAC 33:III.529.A-B, reference 40 CFR 70.7(f)]
- Q. Permittee may request an administrative amendment to the permit to incorporate test results from compliance testing if the following criteria are met:
1. the changes are a result of tests performed upon start-up of newly constructed, installed, or modified equipment or operations;
 2. increases in permitted emissions will not exceed five tons per year for any regulated pollutant;
 3. increases in permitted emissions of Louisiana toxic air pollutants or of federal hazardous air pollutants would not constitute a modification under LAC 33:III. Chapter 51 or under Section 112 (g) of the Clean Air Act;
 4. changes in emissions would not require new source review for prevention of significant deterioration or nonattainment and would not trigger the applicability of any federally applicable requirement;
 5. changes in emissions would not qualify as a significant modification; and
 6. the request is submitted no later than 12 months after commencing operation. [LAC 33:III.523.A, reference 40 CFR 70.7(d)]
- R. Permittee shall submit prompt reports of all permit deviations as specified below to the Office of Environmental Compliance, Enforcement Division. All such reports shall be certified by a responsible official in accordance with 40 CFR 70.5(d).
1. A written report shall be submitted within 7 days of any emission in excess of permit requirements by an amount greater than the Reportable Quantity established for that pollutant in LAC 33:I.Chapter 39.
 2. A written report shall be submitted within 7 days of the initial occurrence of any emission in excess of permit requirements, regardless of the amount, where such emission occurs over a period of seven days or longer.

40 CFR PART 70 GENERAL CONDITIONS

3. A written report shall be submitted quarterly to address all permit deviations not included in paragraphs 1 or 2 above. Unless required by an applicable reporting requirement, a written report is not required during periods in which there is no deviation. The quarterly deviation reports submitted on March 31 and September 30 may be consolidated with the semi-annual reports required by Part 70 General Condition K as long as the report clearly indicates this and all required information is included and clearly delineated in the consolidated report. For previously reported permit deviations, in lieu of attaching the individual deviation reports, the quarterly report may clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. The schedule for submittal of quarterly reports shall be no later than the dates specified below for any permit deviations occurring during the corresponding specified calendar quarter:
 - a. Report by June 30 to cover January through March
 - b. Report by September 30 to cover April through June
 - c. Report by December 31 to cover July through September
 - d. Report by March 31 to cover October through December
4. Any written report submitted in advance of the timeframes specified above, in accordance with an applicable regulation, may serve to meet the reporting requirements of this condition provided such reports are certified in accordance with 40 CFR 70.5(d) and contain all information relevant to the permit deviation. Reporting under this condition does not relieve the permittee from the reporting requirements of any applicable regulation, including LAC 33.I.Chapter 39, LAC 33.III.Chapter 9, and LAC 33.III.5107. [Reference 40 CFR 70.6(a)(3)(iii)(B)]
- S. Permittee shall continue to comply with applicable requirements on a timely basis, and will meet on a timely basis applicable requirements that become effective during the permit term. [Reference 40 CFR 70.5(c)(8)(iii)]
- T. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156;
 2. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158;
 3. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161;
 4. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to 40 CFR 82.166. ("MVAC-like appliance" as defined at 40 CFR 82.152);
 5. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR 82.156; and
 6. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166. [Reference 40 CFR 82, Subpart F]

40 CFR PART 70 GENERAL CONDITIONS

- U. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant. [Reference 40 CFR 82, Subpart B]

- V. Data availability for continuous monitoring or monitoring to collect data at specific intervals: Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the emissions unit is operating. For purposes of reporting monitoring deviations under Part 70 General Conditions K and R, and unless otherwise provided for in the Specific Requirements (or Table 3) of this permit, the minimum degree of data availability shall be at least 90% (based on a monthly average) of the operating time of the emissions unit or activity being monitored. This condition does not apply to Leak Detection and Repair (LDAR) programs for fugitive emissions (e.g., 40 CFR 60 Subpart VV, 40 CFR 63 Subpart H).

**LOUISIANA AIR EMISSION PERMIT
GENERAL CONDITIONS**

- I. This permit is issued on the basis of the emissions reported in the application for approval of emissions and in no way guarantees that the design scheme presented will be capable of controlling the emissions to the type and quantities stated. Failure to install, properly operate and/or maintain all proposed control measures and/or equipment as specified in the application and supplemental information shall be considered a violation of the permit and LAC 33:III.501. If the emissions are determined to be greater than those allowed by the permit (e.g. during the shakedown period for new or modified equipment) or if proposed control measures and/or equipment are not installed or do not perform according to design efficiency, an application to modify the permit must be submitted. All terms and conditions of this permit shall remain in effect unless and until revised by the permitting authority.
- II. The permittee is subject to all applicable provisions of the Louisiana Air Quality Regulations. Violation of the terms and conditions of the permit constitutes a violation of these regulations.
- III. The Emission Rates for Criteria Pollutants, Emission Rates for TAP/HAP & Other Pollutants, and Specific Requirements sections or, where included, Emission Inventory Questionnaire sheets establish the emission limitations and are a part of the permit. Any operating limitations are noted in the Specific Requirements or, where included, Tables 2 and 3 of the permit. The synopsis is based on the application and Emission Inventory Questionnaire dated July 16, 2002, along with supplemental information dated September 21, 2005, January 18, 2006, January 26, 2006, August 16, 2006, and September 26, 2006.
- IV. This permit shall become invalid, for the sources not constructed, if:
 - A. Construction is not commenced, or binding agreements or contractual obligations to undertake a program of construction of the project are not entered into, within two (2) years (18 months for PSD permits) after issuance of this permit, or;
 - B. If construction is discontinued for a period of two (2) years (18 months for PSD permits) or more.

The administrative authority may extend this time period upon a satisfactory showing that an extension is justified.

This provision does not apply to the time period between construction of the approved phases of a phased construction project. However, each phase must commence construction within two (2) years (18 months for PSD permits) of its projected and approved commencement date.
- V. The permittee shall submit semiannual reports of progress outlining the status of construction, noting any design changes, modifications or alterations in the construction schedule which have or may have an effect on the emission rates or ambient air quality levels. These reports shall continue to be submitted until such time as construction is certified as being complete. Furthermore, for any significant change in the design, prior approval shall be obtained from the Office of Environmental Services, Air Permits Division.
- VI. The permittee shall notify the Department of Environmental Quality, Office of Environmental Services, Air Permits Division within ten (10) calendar days from the date that construction is certified as complete and the estimated date of start-up of operation. The appropriate Regional Office shall also be so notified within the same time frame.

**LOUISIANA AIR EMISSION PERMIT
GENERAL CONDITIONS**

- VII. Any emissions testing performed for purposes of demonstrating compliance with the limitations set forth in paragraph III shall be conducted in accordance with the methods described in the Specific Conditions and, where included, Tables 1, 2, 3, 4, and 5 of this permit. Any deviation from or modification of the methods used for testing shall have prior approval from the Office of Environmental Assessment, Air Quality Assessment Division.
- VIII. The emission testing described in paragraph VII above, or established in the specific conditions of this permit, shall be conducted within sixty (60) days after achieving normal production rate or after the end of the shakedown period, but in no event later than 180 days after initial start-up (or restart-up after modification). The Office of Environmental Assessment, Air Quality Assessment Division shall be notified at least (30) days prior to testing and shall be given the opportunity to conduct a pretest meeting and observe the emission testing. The test results shall be submitted to the Air Quality Assessment Division within sixty (60) days after the complete testing. As required by LAC 33:III.913, the permittee shall provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities for proper determination of the emission limits.
- IX. The permittee shall, within 180 days after start-up and shakedown of each project or unit, report to the Office of Environmental Compliance, Enforcement Division any significant difference in operating emission rates as compared to those limitations specified in paragraph III. This report shall also include, but not be limited to, malfunctions and upsets. A permit modification shall be submitted, if necessary, as required in Condition I.
- X. The permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in the specific conditions of this permit for a minimum of at least five (5) years.
- XI. If for any reason the permittee does not comply with, or will not be able to comply with, the emission limitations specified in this permit, the permittee shall provide the Office of Environmental Compliance, Enforcement Division with a written report as specified below.
- A. A written report shall be submitted within 7 days of any emission in excess of permit requirements by an amount greater than the Reportable Quantity established for that pollutant in LAC 33:I.Chapter 39.
 - B. A written report shall be submitted within 7 days of the initial occurrence of any emission in excess of permit requirements, regardless of the amount, where such emission occurs over a period of seven days or longer.
 - C. A written report shall be submitted quarterly to address all emission limitation exceedances not included in paragraphs A or B above. The schedule for submittal of quarterly reports shall be no later than the dates specified below for any emission limitation exceedances occurring during the corresponding specified calendar quarter:
 - 1. Report by June 30 to cover January through March
 - 2. Report by September 30 to cover April through June
 - 3. Report by December 31 to cover July through September
 - 4. Report by March 31 to cover October through December

**LOUISIANA AIR EMISSION PERMIT
GENERAL CONDITIONS**

D. Each report submitted in accordance with this condition shall contain the following information:

1. Description of noncomplying emission(s);
2. Cause of noncompliance;
3. Anticipated time the noncompliance is expected to continue, or if corrected, the duration of the period of noncompliance;
4. Steps taken by the permittee to reduce and eliminate the noncomplying emissions; and
5. Steps taken by the permittee to prevent recurrences of the noncomplying emissions.

E. Any written report submitted in advance of the timeframes specified above, in accordance with an applicable regulation, may serve to meet the reporting requirements of this condition provided all information specified above is included. For Part 70 sources, reports submitted in accordance with Part 70 General Condition R shall serve to meet the requirements of this condition provided all specified information is included. Reporting under this condition does not relieve the permittee from the reporting requirements of any applicable regulation, including LAC 33.I.Chapter 39, LAC 33.III.Chapter 9, and LAC 33.III.5107.

XII. Permittee shall allow the authorized officers and employees of the Department of Environmental Quality, at all reasonable times and upon presentation of identification, to:

- A. Enter upon the permittee's premises where regulated facilities are located, regulated activities are conducted or where records required under this permit are kept;
- B. Have access to and copy any records that are required to be kept under the terms and conditions of this permit, the Louisiana Air Quality Regulations, or the Act;
- C. Inspect any facilities, equipment (including monitoring methods and an operation and maintenance inspection), or operations regulated under this permit; and
- D. Sample or monitor, for the purpose of assuring compliance with this permit or as otherwise authorized by the Act or regulations adopted thereunder, any substances or parameters at any location.

XIII. If samples are taken under Section XII.D. above, the officer or employee obtaining such samples shall give the owner, operator or agent in charge a receipt describing the sample obtained. If requested prior to leaving the premises, a portion of each sample equal in volume or weight to the portion retained shall be given to the owner, operator or agent in charge. If an analysis is made of such samples, a copy of the analysis shall be furnished promptly to the owner, operator or agency in charge.

XIV. The permittee shall allow authorized officers and employees of the Department of Environmental Quality, upon presentation of identification, to enter upon the permittee's premises to investigate potential or alleged violations of the Act or the rules and regulations adopted thereunder. In such investigations, the permittee shall be notified at the time entrance is requested of the nature of the suspected violation. Inspections under this subsection shall be limited to the aspects of alleged violations. However, this shall not in any way preclude prosecution of all violations found.

**LOUISIANA AIR EMISSION PERMIT
GENERAL CONDITIONS**

- XV. The permittee shall comply with the reporting requirements specified under LAC 33:III.919 as well as notification requirements specified under LAC 33:III.927.
- XVI. In the event of any change in ownership of the source described in this permit, the permittee and the succeeding owner shall notify the Office of Environmental Services, Air Permits Division, within ninety (90) days after the event, to amend this permit.
- XVII. Very small emissions to the air resulting from routine operations, that are predictable, expected, periodic, and quantifiable and that are submitted by the permitted facility and approved by the Air Permits Division are considered authorized discharges. Approved activities are noted in the General Condition XVII Activities List of this permit. To be approved as an authorized discharge, these very small releases must:
1. Generally be less than 5 TPY
 2. Be less than the minimum emission rate (MER)
 3. Be scheduled daily, weekly, monthly, etc., or
 4. Be necessary prior to plant startup or after shutdown [line or compressor pressuring/depressuring for example]

These releases are not included in the permit totals because they are small and will have an insignificant impact on air quality. This general condition does not authorize the maintenance of a nuisance, or a danger to public health and safety. The permitted facility must comply with all applicable requirements, including release reporting under LAC 33:I.3901.

- XVIII. Provisions of this permit may be appealed in writing pursuant to La. R.S. 30:2024(A) within 30 days from receipt of the permit. Only those provisions specifically appealed will be suspended by a request for hearing, unless the secretary or the assistant secretary elects to suspend other provisions as well. Construction cannot proceed except as specifically approved by the secretary or assistant secretary. A request for hearing must be sent to the following:

Attention: Office of the Secretary, Legal Services Division
La. Dept. of Environmental Quality
Post Office Box 4302
Baton Rouge, Louisiana 70821-4302

- XIX. Certain Part 70 general conditions may duplicate or conflict with state general conditions. To the extent that any Part 70 conditions conflict with state general conditions, then the Part 70 general conditions control. To the extent that any Part 70 general conditions duplicate any state general conditions, then such state and Part 70 provisions will be enforced as if there is only one condition rather than two conditions.

General Information

AI ID: 26034 Louisiana Energy & Power Authority (LEPA) - Plaquemine Steam Electric Power Plant
Activity Number: PER20020001
Permit Number: 1280-00026-V1
Air - Title V Regular Permit Renewal

Also Known As:	ID	Name	User Group	Start Date
	1280-00026	Louisiana Energy & Power Authority (LEPA) - Plaquemine Steam Electric Power Plant	CDS Number	04-24-2000
	1280-0044	Louisiana Energy & Power Authority (LEPA) - Plaquemine Steam Electric Power Plant	Emission Inventory	03-03-2004
	72-0898014	Federal Tax ID	Federal Tax ID	11-21-1999
	LAR000011502	LEPA - Plaquemine Power Plant	Hazardous Waste Notification	03-01-1996
	LA0109860	WPC File Number	LPDES Permit #	06-25-2003
	LAR05M027	WPC File Number	LPDES Permit #	05-22-2003
	26323	LA Energy & Power Authority (LEPA)	TEMPO Merge	01-10-2001
	42334	LA Energy & Power Authority - Plaquemine Steam Electric Power Pit	TEMPO Merge	01-10-2001
	52298	LA Energy & Power Authority (LEPA) Plaquemine Steam Electric Power Pit	TEMPO Merge	01-10-2001

Physical Location: 59335 W W Harleaux St Plaquemine, LA 70764 Main Phone: 9856879425

Mailing Address: 210 Venture Way Lafayette, LA 70507

Location of Front Gate: 30° 16' 25" latitude, 91° 15' 20" longitude, Coordinate Method: Interpolation - Map, Coordinate Datum: NAD27

Related People:	Name	Mailing Address	Phone (Type)	Relationship
	Cordell Grand	210 Venture Way Lafayette, LA 70507	3372694046 (WP)	Responsible Official for
	Kevin Guidry	59335 WW Harleaux Blvd Plaquemine, LA 70764	KGUIDRY@LEPA.C	Emission Inventory Contact for
	Kevin Guidry	59335 WW Harleaux Blvd Plaquemine, LA 70764	3372378439 (WP)	Emission Inventory Contact for
	Tom Ratajczyk	59335 WW Harleaux Blvd Plaquemine, LA 70764		Accident Prevention Billing Party for

Related Organizations:	Name	Address	Phone (Type)	Relationship
	City of Plaquemine	PO Box 777 Plaquemine, LA 707640777		Owns
	Louisiana Energy & Power Authority (LEPA)	210 Venture Way Lafayette, LA 70507	2256876150 (WP)	Operates
	Louisiana Energy & Power Authority (LEPA)	210 Venture Way Lafayette, LA 70507		Water Billing Party for
	Louisiana Energy & Power Authority (LEPA)	210 Venture Way Lafayette, LA 70507		Air Billing Party for

SIC Codes: 4911, Electric services

General Information

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Note: This report entitled "General Information" contains a summary of facility-level information contained in LDEQ's TEMPO database for this facility and is not considered a part of the permit. Please review the information contained in this document for accuracy and completeness. If any changes are required or if you have questions regarding this document, you may contact Mr. David Ferrand, Environmental Assistance Division, at (225) 219-3247 or email your changes to facupdate@la.gov.

INVENTORIES

AI ID: 26034 - Louisiana Energy & Power Authority (LEPA) - Plaquemine Steam Electric Power Plant
Activity Number: PER20020001
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Subject Item Inventory:

ID	Description	Tank Volume	Max. Operating Rate	Normal Operating Rate	Contents	Operating Time
EQT001	C1 - Boiler No. 1		12 MW	12 MW		8760 hr/yr (All Year)
EQT002	C2 - Boiler No. 2		22.8 MW	12 MW		8760 hr/yr (All Year)
EQT003	X1 - Cooling Tower No. 1					8760 hr/yr (All Year)
EQT004	X2 - Cooling Tower No. 2					8760 hr/yr (All Year)

Subject Item Groups:

ID	Description	Included Components (from Above)
GRP001	Plaquemine Steam Power Plant Facility	EQT1 C1 - Boiler No. 1
GRP001	Plaquemine Steam Power Plant Facility	EQT2 C2 - Boiler No. 2
GRP001	Plaquemine Steam Power Plant Facility	EQT3 X1 - Cooling Tower No. 1
GRP001	Plaquemine Steam Power Plant Facility	EQT4 X2 - Cooling Tower No. 2

Relationships:

Stack Information:

ID	Velocity (ft/sec)	Flow Rate (cubic ft/min-actual)	Diameter (feet)	Discharge Area (square feet)	Height (feet)	Temperature (oF)
EQT001			6		65	460
EQT002			6		65	746
EQT003	54.33	92148	25		48	
EQT004			32		52	

Fee Information:

Subj Item Id	Multiplier	Units Of Measure	Fee Desc
GRP001	24	MW	1420 - C) Electric Power Gen. (Natural Gas Fired) (Rated Capacity)

EMISSION RATES FOR CRITERIA POLLUTANTS

AI ID: 26034 - Louisiana Energy & Power Authority (LEPA) - Plaquemine Steam Electric Power Plant
 Activity Number: PER20020001
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All phases

Subject Item	PM ₁₀			SO ₂			NOx			CO			VOC		
	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 001 C1	1.51	1.51	6.61	0.16	0.16	0.69	74.11	74.11	324.64	22.24	22.24	97.39	1.45	1.45	6.38
EQT 002 C2	1.52	1.52	6.67	0.16	0.16	0.70	38.36	39.77	168.02	28.35	33.76	124.17	1.46	1.46	6.43
EQT 003 X1	3.47	3.47	15.19												
EQT 004 X2	3.88	3.88	16.98												

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals

Permit Phase Totals:

PM10: 45.45 tons/yr
 SO2: 1.39 tons/yr
 NOx: 492.66 tons/yr
 CO: 221.56 tons/yr
 VOC: 12.81 tons/yr

Emission rates Notes:

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

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All phases

Subject Item	1,4-Dichlorobenzene			Benzene			Formaldehyde			Toluene			n-Hexane		
	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 001 C1	< 0.001	< 0.001	0.001	< 0.001	< 0.001	0.002	0.020	0.020	0.020	0.001	0.001	0.001	0.476	0.476	2.086
EQT 002 C2	0.003	0.003	0.014	0.006	0.006	0.025	0.020	0.020	0.088	0.001	0.001	0.004	0.481	0.481	2.105

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals

Permit Parameter Totals:

1,4-Dichlorobenzene: 0.015 tons/yr
Benzene: 0.027 tons/yr
Formaldehyde: 0.108 tons/yr
n-Hexane: 4.191 tons/yr
Toluene: 0.006 tons/yr

Emission Rates Notes:

SPECIFIC REQUIREMENTS

AI ID: 26034 - Louisiana Energy & Power Authority (LEPA) - Plaquemine Steam Electric Power Plant

Activity Number: PER20020001

Permit Number: 1280-00026-V1

Air - Title V Regular Permit Renewal

EQT001 C1 - Boiler No. 1

- 1 Opacity \leq 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel). [LAC 33:III.1101.B]
Which Months: All Year Statistical Basis: None specified
- 2 Opacity \leq 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel). [LAC 33:III.1311.C]
Which Months: All Year Statistical Basis: Six-minute average
- 3 Total suspended particulate \leq 0.6 lb/MMBTU of heat input (Complies by using sweet natural gas as fuel). [LAC 33:III.1313.C]
Which Months: All Year Statistical Basis: None specified
- 4 Equipment/operational data recordkeeping by electronic or hard copy continuously. Record and keep on site for at least two years the data required to demonstrate exemption from the provisions of LAC 33:III.Chapter 15. Record all emissions data in the units of the standard using the averaging time of the standard. Make records available to a representative of DEQ or the U.S. EPA on request. [LAC 33:III.1513]
- 5 Submit notification: Due at least 30 days prior to performance/emissions test to the Office of Environmental Assessment, Environmental Technology Division, Engineering Services, to provide the opportunity to conduct a pretest meeting and observe the emissions testing. [LAC 33:III.501.C.6]
- 6 Submit report: Due within 60 days after performance/emissions test. Submit emissions test results to the Office of Environmental Assessment, Environmental Technology Division, Engineering Services. [LAC 33:III.501.C.6]
- 7 Conduct a performance/emissions test: Due within 180 days after initial startup (or restart-up after modification), or within 60 days after achieving normal production rate or end of the shutdown period, whichever is earliest. The stack test's purpose is to demonstrate compliance with the emission limits of this permit. Test methods and procedures shall be in accordance with New Source Performance Standards, 40 CFR 60, Appendix A, Method 7E - Determination of Nitrogen Oxides Emissions from Stationary Sources, and Method 10 - Determination of Carbon Monoxide Emissions from Stationary Sources. Use alternate stack test methods only with the prior approval of the Office of Environmental Assessment, Environmental Technology Division, Engineering Services. As required by LAC 33:III.913, provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities for proper determination of the emission limits. [LAC 33:III.501.C.6]

EQT002 C2 - Boiler No. 2

- 8 Opacity \leq 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel). [LAC 33:III.1101.B]
Which Months: All Year Statistical Basis: None specified
- 9 Opacity \leq 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel). [LAC 33:III.1311.C]
Which Months: All Year Statistical Basis: Six-minute average
- 10 Total suspended particulate \leq 0.6 lb/MMBTU of heat input (Complies by using sweet natural gas as fuel). [LAC 33:III.1313.C]
Which Months: All Year Statistical Basis: None specified
- 11 Equipment/operational data recordkeeping by electronic or hard copy continuously. Record and keep on site for at least two years the data required to demonstrate exemption from the provisions of LAC 33:III.Chapter 15. Record all emissions data in the units of the standard using the averaging time of the standard. Make records available to a representative of DEQ or the U.S. EPA on request. [LAC 33:III.1513]
- 12 Submit notification: Due at least 30 days prior to performance/emissions test to the Office of Environmental Assessment, Environmental Technology Division, Engineering Services, to provide the opportunity to conduct a pretest meeting and observe the emissions testing. [LAC 33:III.501.C.6]

SPECIFIC REQUIREMENTS

AI ID: 26034 - Louisiana Energy & Power Authority (LEPA) - Plaquemine Steam Electric Power Plant

Activity Number: PER20020001

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EQT002 C2 - Boiler No. 2

- 13 Submit report: Due within 60 days after performance/emissions test. Submit emissions test results to the Office of Environmental Assessment, Environmental Technology Division, Engineering Services. [LAC 33:III.501.C.6]
- 14 Conduct a performance/emissions test: Due within 180 days after initial startup (or restart-up after modification), or within 60 days after achieving normal production rate or end of the shutdown period, whichever is earliest. The stack test's purpose is to demonstrate compliance with the emission limits of this permit. Test methods and procedures shall be in accordance with New Source Performance Standards, 40 CFR 60, Appendix A, Method 7E - Determination of Nitrogen Oxides Emissions from Stationary Sources, and Method 10 - Determination of Carbon Monoxide Emissions from Stationary Sources. Use alternate stack test methods only with the prior approval of the Office of Environmental Assessment, Environmental Technology Division, Engineering Services. As required by LAC 33:III.913, provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities for proper determination of the emission limits. [LAC 33:III.501.C.6]
- 15 Particulate matter (10 microns or less) \leq 0.10 lb/MMBTU (43 nanograms per joule) heat input derived from fossil fuel or fossil residue. Subpart D. [40 CFR 60.42(a)(1)]
- Which Months: All Year Statistical Basis: None specified
- 16 Opacity \leq 20 percent except for one six-minute period per hour of not more than 27 percent opacity. Subpart D. [40 CFR 60.42(a)(2)]
- Which Months: All Year Statistical Basis: Six-minute average
- 17 Nitrogen oxides \leq 0.20 lb/MMBTU. Subpart D. [40 CFR 60.44(a)(2)]
- Which Months: All Year Statistical Basis: None specified
- 18 The automatic system that controls the air inlet vanes shall be utilized at all times that this source is in operation. If this automatic system that controls the air inlet vanes is not available for utilization or is not working properly, this source shall not be allowed to operate until the automatic system that controls the air inlet vanes is available for use and is working properly. In addition, permittee shall not allow the heat input rate of this boiler to exceed 272 million BTU/hr. T
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- Notwithstanding the above statements, this source shall be allowed to operate when the Governor of the State of Louisiana declares a state of emergency that covers the area in which this source is located. Such operation shall not be considered a violation of this specific condition. Upon expiration of such a declaration, this source shall immediately come into compliance with the requirements set forth in this specific condition. [40 CFR 60.45(b)(3)]
- 19 Submit excess emission and monitoring system performance reports: Due semiannually for each six-month period in the calendar year. Postmark all semiannual reports by the 30th day following the end of each six-month period. Include the information required in 40 CFR 60.7(c). Subpart D. [40 CFR 60.45(g)]
- 20 Oxygen or Carbon dioxide monitored by continuous emission monitor (CEM) continuously, except as provided in 40 CFR 60.45(b). Convert the data to the units of the applicable standard as specified in 40 CFR 60.45(e) and (f). Subpart D. [40 CFR 60.45]
- Which Months: All Year Statistical Basis: None specified
- 21 Conduct the performance tests required in 40 CFR 60.8 using as reference methods and procedures the test methods in 40 CFR 60 Appendix A or other methods and procedures as specified in 40 CFR 60.46, except as provided in 40 CFR 60.8(b). Subpart D. [40 CFR 60.46(a)]
- 22 Specific QA/QC Procedures: Calibrate, operate, and maintain instrumentation using procedures that take into account manufacturer's specifications. [40 CFR 64.3(b)(3)]
- 23 Fuel rate monitored by flow rate monitoring device continuously. Permittee shall take no fewer than four flow measurements in any hour using a differential pressure cell flow meter with a minimum accuracy of one percent of the flow rate. [40 CFR 64.6(c)(1)]
- Which Months: All Year Statistical Basis: 4 recorded measurements during any one hour period
- 24 Electrical output \leq 22.8 MW. Permittee shall take no fewer than four electric output measurements in any one hour. Electrical output shall be measured with a transducer with a minimum accuracy of two percent. [40 CFR 64.6(c)(1)]
- 25 An exceedance shall be defined as a heat input rate exceeding 272 million BTU/hr. Compliance with this condition shall be determined by using the fuel flow rate and the heat content value of the fuel to calculate the heat input rate. [40 CFR 64.6(c)(2)]
- 26 Submit Notification: Due at the DEQ upon the establishment or reestablishment of any exceedance or excursion level, for purposes of responding to and reporting exceedances or excursions under 40 CFR 64.7 and 64.8. [40 CFR 64.6(c)(2)]

SPECIFIC REQUIREMENTS

AI ID: 26034 - Louisiana Energy & Power Authority (LEPA) - Plaquemine Steam Electric Power Plant

Activity Number: PER20020001

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EQT002 **C2 - Boiler No. 2**

- 27 An exceedance shall be defined as an electrical output reading in excess of 22.8 MW. [40 CFR 64.6(c)(2)]
- 28 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the electrical output, fuel rate, and heat input rate. [40 CFR 64.6(c)(4)]
- 29 Conduct the monitoring required under 40 CFR 64 upon issuance of a part 70 or 71 permit that includes such monitoring, or by such later date specified in the permit pursuant to 40 CFR 64.6(d). [40 CFR 64.7(a)]
- 30 Maintain the monitoring required under 40 CFR 64 at all times, including but not limited to maintaining necessary parts for routine repairs of the monitoring equipment. [40 CFR 64.7(b)]
- 31 Conduct all monitoring required under 40 CFR 64 in continuous operation (or collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating, except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments). Do not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities for purposes of 40 CFR 64, including data averages and calculations, or for fulfilling a minimum data availability requirement, if applicable. Use all the data collected during all other periods in assessing the operation of the control device and associated control system. [40 CFR 64.7(c)]
- 32 Restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable upon detecting an excursion or exceedance, in accordance with good air pollution control practices for minimizing emissions. Minimize the period of any startup, shutdown or malfunction, and take any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). [40 CFR 64.7(d)(1)]
- 33 Submit written notification: Due to the Office of Environmental Compliance within 72 hours upon identifying a failure to achieve compliance with the nitrogen oxides emission limitation for which, after approval of monitoring under 40 CFR 64, the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions. If necessary, submit a proposed modification to the part 70 or 71 permit to address the necessary monitoring changes. [40 CFR 64.7(e)]
- 34 Submit report: Due on and after the date specified in 40 CFR 64.7(a) by which the owner or operator must use monitoring that meets the requirements of 40 CFR 64. Submit monitoring reports to the DEQ in accordance with 40 CFR 70.6(a)(3)(iii). Include in a report for monitoring under 40 CFR 64, at a minimum, the information required under 40 CFR 70.6(a)(3)(iii) and the information specified in 40 CFR 64.9(a)(2)(i) through (a)(2)(iii), as applicable. [40 CFR 64.9(a)]
- 35 Comply with the recordkeeping requirements specified in 40 CFR 70.6(a)(3)(ii). [40 CFR 64.9(b)(1)]
- 36 Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Maintain records of monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 CFR 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Maintain these records for a period of at least five years. [40 CFR 64.9(b)(1)]
- 37 Monitoring data recordkeeping by electronic or hard copy continuously. Maintain these records for a period of at least five years. [40 CFR 64.9(b)(1)]

EQT003 **X1 - Cooling Tower No. 1**

- 38 Opacity \leq 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel). [LAC 33:III.1311.C]
Which Months: All Year Statistical Basis: Six-minute average

EQT004 **X2 - Cooling Tower No. 2**

SPECIFIC REQUIREMENTS

AI ID: 26034 - Louisiana Energy & Power Authority (LEPA) - Plaquemine Steam Electric Power Plant

Activity Number: PER20020001

Permit Number: 1280-00026-V1

Air - Title V Regular Permit Renewal

EQT004 **X2 - Cooling Tower No. 2**

- 39 Opacity \leq 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel). [LAC 33:III.1311.C]
Which Months: All Year Statistical Basis: Six-minute average

GRP001 **Plaquemine Steam Power Plant Facility**

- 40 Emissions of smoke which pass onto or across a public road and create a traffic hazard by impairment of visibility as defined in LAC 33:III.111 or intensify an existing traffic hazard condition are prohibited. [LAC 33:III.1103]
41 Outdoor burning of waste material or other combustible material is prohibited. [LAC 33:III.1109.B]
42 Emissions of particulate matter which pass onto or across a public road and create a traffic hazard by impairment of visibility or intensify an existing traffic hazard condition are prohibited. [LAC 33:III.1303.B]
43 Maintain best practical housekeeping and maintenance practices at the highest possible standards to reduce the quantity of organic compounds emissions. Good housekeeping shall include, but not be limited to, the practices listed in LAC 33:III.2113.A.1-5. [LAC 33:III.2113.A]
44 Failure to pay the prescribed application fee or annual fee as provided herein, within 90 days after the due date, will constitute a violation of these regulations and shall subject the person to applicable enforcement actions under the Louisiana Environmental Quality Act including, but not limited to, revocation or suspension of the applicable permit, license, registration, or variance. [LAC 33:III.219]
45 Carbon monoxide \leq 221.56 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
46 Nitrogen oxides \leq 492.66 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
47 Particulate matter (10 microns or less) \leq 45.45 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
48 Sulfur dioxide \leq 1.39 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
49 VOC, Total \leq 12.81 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
50 Benzene \leq 0.027 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
51 1,4-Dichlorobenzene \leq 0.015 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
52 Formaldehyde \leq 0.108 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
53 Toluene \leq 0.006 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
54 n-Hexane \leq 4.191 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
55 Alternate Operating Scenario: Operating plan recordkeeping by logbook upon each occurrence of making a change from one operating scenario to another. Record the operating scenario under which the facility is currently operating. Include in this record the identity of the sources involved, the permit number under which the scenario is included, and the date of change. Keep a copy of the log on site for at least two years. [LAC 33:III.507.G.5]
56 Activate the preplanned abatement strategy listed in LAC 33:III.5611. Table 5 when the administrative authority declares an Air Pollution Alert. [LAC 33:III.5609.A.1.b]

SPECIFIC REQUIREMENTS

AI ID: 26034 - Louisiana Energy & Power Authority (LEPA) - Plaquemine Steam Electric Power Plant

Activity Number: PER20020001

Permit Number: 1280-00026-V1

Air - Title V Regular Permit Renewal

GRP001 **Plaquemine Steam Power Plant Facility**

- 57 Activate the preplanned strategy listed in LAC 33:III.561 I. Table 6 when the administrative authority declares an Air Pollution Warning. [LAC 33:III.5609.A.2.b]
- 58 Activate the preplanned abatement strategy listed in LAC 33:III.561 I. Table 7 when the administrative authority declares an Air Pollution Emergency. [LAC 33:III.5609.A.3.b]
- 59 Prepare standby plans for the reduction of emissions during periods of Air Pollution Alert, Air Pollution Warning and Air Pollution Emergency. Design standby plans to reduce or eliminate emissions in accordance with the objectives as set forth in LAC 33:III.561 I. Tables 5, 6, and 7. [LAC 33:III.5609.A]
- 60 Submit Emission Inventory (EI)/Annual Emissions Statement: Due annually, by the 31st of March for the period January 1 to December 31 of the previous year unless otherwise directed. Submit emission inventory data in the format specified by the Office of Environmental Assessment, Air Quality Assessment Division. Include all data applicable to the emissions source(s), as specified in LAC 33:III.919.A-D. [LAC 33:III.919.D]
- 61 All affected facilities shall comply with all applicable provisions in 40 CFR 60 Subpart A. [40 CFR 60]
- 62 Submit Title V permit application for renewal: Due 180 calendar days before permit expiration date. [40 CFR 70.5(a)(1)(iii)]
- 63 Submit Title V monitoring results report: Due semiannually, by March 31st and September 30th for the preceding periods encompassing July through December and January through June, respectively. Submit reports to the Office of Environmental Compliance, Surveillance Division. Certify reports by a responsible company official. Clearly identify all instances of deviations from permitted monitoring requirements. For previously reported deviations, in lieu of attaching the individual deviation reports, clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. [40 CFR 70.6(a)(3)(iii)(A)]
- 64 Submit Title V excess emissions report: Due quarterly, by June 30, September 30, December 31, March 31. Submit reports of all permit deviations to the Office of Environmental Compliance, Surveillance Division. Certify all reports by a responsible official in accordance with 40 CFR 70.5(d). The reports submitted on March 31 and September 30 may be consolidated with the semi-annual reports required by 40 CFR 70.6(a)(3)(iii)(A) as long as the report clearly indicates this and all required information is included and clearly delineated in the consolidated report. [40 CFR 70.6(a)(3)(iii)(B)]
- 65 Submit Title V compliance certification: Due annually, by the 31st of March. Submit to the Office of Environmental Compliance, Surveillance Division. [40 CFR 70.6(c)(5)(iv)]



COMPLIANCE ASSURANCE MONITORING PLAN: FLUE GAS RECIRCULATION FOR NO_x CONTROL

I. Background

A. Emissions Unit

Description: Boiler No.2

Identification: C2

Facility: LEPA Plaquemine Steam Power Plant

B. Applicable Regulation, Emission Limit and Monitoring Requirements

Regulation No.: Operating Permit No. 1280-00026-VO

Emissions Limits: 0.14 lbs/MMBTU (based on stack test data)

Monitoring requirements: Not applicable. Per 40 CFR 60.45(a)(3), if the owner or operator demonstrates during the performance test that emissions of nitrogen oxides are less than 70 percent of the applicable standards in §60.44, a continuous monitoring system for measuring nitrogen oxides emissions is not required.

C. Control Technology

Flue gas recirculation (FGR)

II. Monitoring Approach

The key elements of the monitoring approach, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table 1. The parameters that will be monitored are fuel flow and heat content, and gross electrical generation output.

TABLE 1			
	Indicator No.1	Indicator No. 2	Indicator No. 3
I. Indicator	Fuel Flow Rate and Heat Content	Gross Electrical Generation Output	FGR Damper Position
Measurement Approach	The fuel flow rate will be monitored on an hourly basis. Fuel heat content will be obtained from the fuel supplier on a monthly basis.	The unit gross generation output will be measured at the generator bus and be collected on an hourly basis.	The FGR damper position is determined by the boiler control system.



II. Indicator Range	An excursion is defined as fuel flow rate exceeding 270 kcfh adjusted for heat content of fuel (1.078 MMBTU/Mcf based on stack test data). Fuel flow rates during startup (0-80 kcfh) will be exempt from excursions.	An excursion will be defined as an output greater than 22.8 MW (based on stack test data). Unit operations such as startup (0 – 5 MW) and shutdown are not normal operations and will not be classified as excursions.	An excursion will be defined as the FGR damper being open less than 25% at a fuel flow greater than 245 kcfh. Unit operations such as startup (0 – 5 MW) and shutdown will not be classified as excursions.
III. Performance Criteria			
Data Representativeness <i>was</i> <i>±1%</i>	While operating, the natural gas flow rate will be measured with a differential pressure cell flow meter with a minimum accuracy of <u>61</u> percent of the flow rate. Heat content of the fuel will be obtained from a gas analysis report from the supplier.	The gross electrical generation output will be measured from a transducer with a minimum accuracy of <u>62</u> percent. <i>was</i> <i>±2%</i>	The FGR damper position demand signal will be sent to the FGR valve by the boiler control system and will be stored by the data logger.
Verification of Operational Status	N/A	N/A	N/A
QA/QC Practices and Criteria	Annual calibration of fuel flow meters (acceptance criteria: 61%).	Annual calibration the gross electrical generation output (acceptance criteria: 62%).	None
Monitoring Frequency	Fuel flow rate will be monitored continuously.	Gross electrical generator output will be monitored continuously.	While operating, the position of the FGR damper is checked by an operator on a daily basis.
Data Collection Procedures	The Boiler Control System will record the hourly fuel flow (1000 ft ³ /hr). Heat content of fuel will be obtained from supplier.	The Boiler Control System will record the gross electrical generation hourly.	While operating, the FGR damper demand signal is recorded 4 times per hour by the boiler control system.
Averaging Period	<u>Fuel flow rate:</u> Hourly <u>Heat Content:</u> Monthly	<u>Gross Generation:</u> Hourly	NA

✓ 4x/hr ?



III. Justification

A. Background

The pollutant specific emissions unit (PSEU) is a 318 MMBtu/hr boiler fired with natural gas. The boiler is equipped with a FGR system and is subject to 40 CFR Part 60, Subpart D. The boiler was tested for NO_x emission rates to demonstrate compliance with NSPS and permit limitations. Continuous emission monitoring of O₂, CO₂, NO_x, and CO was performed in accordance with USPEA Reference Methods 3A, 3A, 7E, and 10, respectively. Traverse sampling, velocity, moisture content and volumetric flow rate were conducted in accordance with USEPA Reference Methods 1-4. USEPA Reference Method 19 was utilized to determine NO_x concentration in dry basis units of lb/MMBTU.

When the FGR valve position demand was implemented into the Boiler Control System, the maximum % open of the FGR valve at which the recirculation of flue gas had a positive effect on the reduction of NO_x was found to be 25%. The valve being opened MORE than 25 % had no effects on NO_x reduction, nor was it detrimental to the operation of the unit. Therefore, to ensure the valve was opened to at least 25% for the purposes of NO_x reduction for Unit #2, the FGR valve was programmed to open to 40% max (allowing a 15% margin). The aforementioned stack testing that was conducted on June 2, 2000, showed actual NO_x emissions at 0.134 lbs/MMBTU at 22.8 MW, which exempted the facility from installing a continuous emissions monitoring system (CEMS) per NSPS, Subpart D.

Relative to the proposed indicators in this plan, the aforementioned stack testing showed an average fuel flow rate of 270,000 ft³/hr with a heat content of 1.078 MMBTU/Mcf, a maximum gross electrical generation level of 22.8 MW and the FGR Damper opened at greater than 25%.

B. Rationale for Selection of Performance Indicators

The fuel flow and associated heat content, gross electrical generation output, and FGR damper position demand were selected as the performance indicators because they are indicative of operation of the unit in a manner necessary to comply with the NO_x emission standards.

C. Rationale for Selection of Indicator Levels

For the fuel flow rate and heat content, an excursion will be defined as a rate greater than 270 kcfh adjusted for the heat content of the natural gas used during the stack test (1.078 MMBTU/Mcf). For the gross electrical generation output, an excursion will be defined as gross generation above 22.8 MW, which considers the aforementioned stack test maximum output that maintained a NO_x concentration level below 0.20 lb/MMBTU. For the FGR damper position, an excursion will be defined as the damper being opened less than 25% at a fuel flow greater than 245 kcfh. Atypical



unit operations such as startup (0 – 5 MW) and shutdown will be exempted from excursions.

Relative to the NO_x emission rate, the facility will continue to ensure that the boiler is operated with a margin of compliance, so that corrective action may be taken before the 0.20 lb/MMBtu emission limit (per NSPS, Subpart D) is exceeded.

Plaquemine Unit #2 **CAM Plan Data**

*The information provided in this chart is based on the FGR Position Demand signal sent from the Boiler Control System as a function of Fuel Flow.

Fuel Gas Flow (kcfh)	FGR Position Demand (%)
124	0
245	40
270	40
350	40

